## The Relationship Between Weight Gain, Cyclicality of Diabetologic Education and the Experienced Stress: A Study Involving Pregnant Women

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Abstract: Introduction: In recent years, there has been an intensive development of research into the physiological relationships between the experienced stress and obesity. Moreover, strong chronic stress leads to the disorganization of a person's activeness on various levels of functioning, including the behavioral and cognitive sphere (also in one's diet). Aim: The present work addresses the following research questions: Is there a relationship between an increase in stress related to the disease and the need for the cyclicality of diabetologic education in gestational diabetes? Are there any differences in terms of the experienced stress during the last three months of pregnancy in women with gestational diabetes and in normal pregnancy between the patients with normal weight gains and those with abnormal weight gains? Are there any differences in terms of stress coping styles in women with gestational diabetes and in normal pregnancy between the patients with normal weight gains and those with abnormal weight gains? Method: The study involved pregnant women with gestational diabetes (treated with diet, without insulin therapy) and in normal pregnancy - 206 women in total. The following psychometric tools were employed: Perceived Stress Scale (PSS; Cohen, Kamarck, Mermelstein), Coping Inventory for Stressful Situations (CISS; Endler, Parker) and authors' own questionnaire. Gestational diabetes mellitus was diagnosed on the basis of the results of fasting oral glucose tolerance test (75 g OGTT). Body weight measurements were confirmed in a diagnostic interview, taking into account medical data. Regularities in weight gains in pregnancy were determined according to the recommendations of the Polish Gynecological Society and American norms determined by the Institute of Medicine (IOM). Conclusions: An increase in stress related to the disease varies in patients with differing requirements for the cyclical nature of diabetologic education (i.e. education which is systematically repeated). There are no differences in terms of recently experienced stress and stress coping styles between women with gestational diabetes and those in normal pregnancy. There is a relationship between weight gains in pregnancy and the stress experienced in life as well as stress coping styles - both in pregnancy complicated by diabetes and in physiological pregnancy. In the discussion of the obtained results, the authors refer to scientific reports from English-language magazines of international range.

**Keywords:** diabetologic education, gestational diabetes, stress, weight gain in pregnancy **Conference Title:** ICGDO 2017: International Conference on Gestational Diabetes and Obesity

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